

PTO/SB/08A (08-03)

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**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Sheet 1 of 8

**Complete if Known**

Application Number	09/990,896
Filing Date	11/16/2001
First Named Inventor	James Robert KELTON
Art Unit	2665
Examiner Name	NGUYEN, Steven
Attorney Docket Number	VIXS.0100280 (1459-VIXS028)

Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)			
D	AA	US- 5,027,203	06-25-1991	Samad, et al.	
D	AB	US- 5,115,812	05-26-1992	Sano, et al.	
D	AC	US- 5,475,434	12-12-1995	Kim	
D	AD	US- 5,602,589	02-11-1997	Vishwanath, et al.	
D	AE	US- 5,635,985	06-03-1997	Boyce, et al.	
D	AF	US- 5,644,361	07-01-1997	Ran, et al.	
D	AG	US- 5,652,749	07-29-1997	Davenport, et al.	
D	AH	US- 5,732,391	03-24-1998	Fiocca	
D	AI	US- 5,737,020	04-07-1998	Hall, et al.	
D	AJ	US- 5,740,028	04-14-1998	Sugiyama, et al.	
D	AK	US- 5,940,130	08-17-1999	Nilsson, et al.	
D	AL	US- 5,996,029	11-30-1999	Sugiyama, et al.	
D	AM	US- 6,005,623	12-21-1999	Takahashi, et al.	
D	AN	US- 6,005,624	12-21-1999	Vainsencher	
D	AO	US- 6,014,694	01-11-2000	Aharoni, et al.	
D	AP	US- 6,040,863	03-21-2000	Kato	
D	AQ	US- 6,081,295	06-27-2000	Adolph, et al.	
D	AR	US- 6,141,693	10-31-2000	Perlman, et al.	
D	AS	US- 6,144,402	11-07-2000	Norsworthy, et al.	

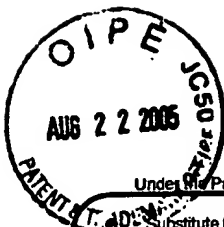
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T <sup>4</sup>
		Country Code <sup>3</sup> Number <sup>4</sup> Kind Code <sup>5</sup> (if known)				
D	AT	EP 0661826 A2	07-05-1995	IBM		
D	AU	EP 0739138 A2	10-23-1996	Kalmanek, et al.		
D	AV	EP 0805599 A2	11-05-1997	Oki Electric Industry		
D	AW	EP 0855805 A2	07-29-1998	Sharp KK		
D	AX	EP 0896300 B1	02-10-1999	Matsushita Electric		
D	AY	EP 0901285 A1	02-10-1999	Yamaguchi		

Examiner Signature		Date Considered	1/17/06
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Sheet 2 of 8**Complete if Known**

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		Number-Kind Code <sup>2</sup> (# known)			
	AZ	US- 6,167,084	12-26-2000	Wang, et al.	
	BA	US- 6,182,203	01-30-2001	Simar, Jr., et al.	
	BB	US- 6,215,821	04-10-2001	Chen	
	BC	US- 6,219,358	04-17-2001	Pinder, et al.	
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	BE	US- 6,236,683	05-22-2001	Mougeat, et al.	
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	BN	US- 6,526,099	02-25-2003	Chistopoulos, et al.	
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	BP	US- 6,584,509	06-24-2003	Putzolu	
	BQ	US- 6,724,726	04-20-2004	Coudreuse	
	BR	US- 6,748,020	06-08-2004	Eifrig, et al.	

**FOREIGN PATENT DOCUMENTS**

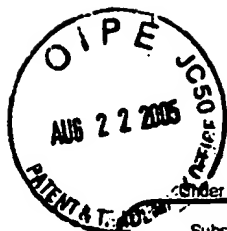
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		Country Code <sup>3</sup> Number <sup>4</sup> Kind Code <sup>5</sup> (# known)				
	BS	EP 0955607 A2	11-10-1999	Sarnoff Corp.		
	BT	EP 1032214 A2	08-30-2000	Matsushita Electric		
	BU	WO 01/95633 A2	12-13-2001	Gen Instrument Group		
	BV	WO 02/080518 A2	10-10-2002	Laksono		
	BW	JP 07-210670 A	08-11-1995	Fuji Xerox Ltd.		
	BX	EP 1087625 A2	03-28-2001	Sostawa et al.		

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		Number-Kind Code <sup>2</sup> (if known)			
<i>[initials]</i>	BY	US- 6,438,168	08-20-2002	Arye	
<i>[initials]</i>	BZ	US- 2001/0026591 A1	10-04-2001	Keren, et al.	
<i>[initials]</i>	CA	US- 2002/110193 A1	08-15-2002	Kyoon, et al.	
<i>[initials]</i>	CB	US- 2002/138259 A1	09-26-2002	Kawahara	
<i>[initials]</i>	CC	US- 2002/196851 A1	12-26-2002	Arnaud	
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<i>[initials]</i>	CE	US- 2003/0152148 A1	08-14-2003	Laksono	
<i>[initials]</i>	CF	US- 4,866,395	09-12-1989	Hosteller	
<i>[initials]</i>	CG	US- 6,549,561	04-15-2003	Crawford	
<i>[initials]</i>	CH	US- 5,093,847	03-03-1992	Cheng	
<i>[initials]</i>	CI	US- 5,253,056	10-12-1993	Puri	
<i>[initials]</i>	CJ	US- 6,714,202	03-03-2004	Dorrell	
<i>[initials]</i>	CK	US- 5,844,545	12-01-1992	Suzuki, et al.	
<i>[initials]</i>	CL	US- 5,563,950	10-08-1996	Easter, et al.	
<i>[initials]</i>	CM	US- 5,850,443	12-15-1998	Van Oorschot, et al.	
<i>[initials]</i>	CN	US- 2002/0145931 A1	10-10-2002	Pitts	
<i>[initials]</i>	CO	US- 2003/0093661 A1	05-15-2003	Loh, et al.	
		US-			
		US-			

**FOREIGN PATENT DOCUMENTS**

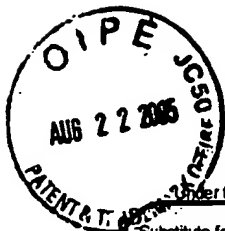
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Sheet 4

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Attorney Docket Number VIXS.0100280 (1459-VIXS028)

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Application Number	09/990,896
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First Named Inventor	James Robert KELTON
Art Unit	2665
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**NON PATENT LITERATURE DOCUMENTS**

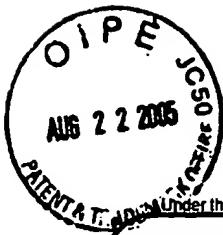
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
86	CP	YU, Donghoom, et al., "Fast Motion Estimation for Shape Coding in MPEG-4," IEEE Transactions on Circuits and Systems for Video Technology, Vol. 13, No. 4, 2003 IEEE, April 2003, pp. 358-363	
10	CQ	PYUN, Jae-Young, "QoS Provisioning for Video Streaming Over IEEE 802.11 Wireless LAN," (abridged) IEEE Conferences in Consumer Electronics, June 16, 2003, EE Times, Seoul, Korea, < <a href="http://eetimes.com/printableArticle?doc_id=OEG2003061S0070">http://eetimes.com/printableArticle?doc_id=OEG2003061S0070</a> > retrieved July 8, 2003	
11	CR	YOUN, Jeongnam et al., "Video Transcoding For Multiple Clients," Proceedings of the SPIE, Bellingham, VA, vol. 4067, XP008012075, pp. 76-85, University of Washington, Seattle, WA	
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11	CW	SHERWOOD, P. Greg et al., "Efficient Image and Channel Coding for Wireless Packet Networks," University of California, La Jolla, California	
11	CX	ASSUNCAO, Pedro et al., "Rate Reduction Techniques for MPEG-2 Video Bit Streams," SPIE, Vol. 2952, April 1996, pp. 450-459, University of Essex, Colchester, England	
11	CY	YIN, Peng et al., "Video Transcoding by Reducing Spatial Resolution," Princeton University, 2000, Princeton, New Jersey	

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Sheet	5	of	8
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### NON PATENT LITERATURE DOCUMENTS

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	CZ	SHANABLEH, Tamer et al., "Heterogeneous Video Transcoding to Lower Spatio-Temporal Resolutions and Difference Encoding Formats," IEEE Transactions on Multimedia, Vol. 2, No. 2, June 2000, pp. 101-110, Engineering and Physical Sciences Research Council, Colchester, U.K.	
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	DB	FAN, Zhigang et al. "Maximum Likelihood Estimation of JPEG Quantization Table in the Identification of Bitmap Compression History," Xerox Corporation, Webster, New York	
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	DD	RAMANUJAN, Ranga S. et al., "Adaptive Streaming of MPEG Video Over IP Networks," 22nd IEEE Conference on Local Computer Networks (LCN '97), November 02-05, 1997, 1997 IEEE, pp. 398-409, Architecture Technology Corporation, Minneapolis, MN	
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	DH	OH, Hwang-Seok et al., "Block-Matching Algorithm Based On An Adaptive Reduction of the Search Area For Motion Estimation," Real-Time Imaging, Academic Press Ltd., Vol. 56, No. 5, Oct 2000, pp. 407-414, XP004419498 ISSN: 1077-2014, Taejeon, Korea	
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SD	DJ	FUKUNAGA, Shigeru et al., "MPEG-4 Video Verification Model Version 16.0" International Organization for Standardization: Coding of Moving Pictures and Audio, Vol. N3312, March 2000, pp. 1-380, XP000861688.	
JK	DK	KRONER, Sabine et al., "Edge Preserving Noise Smoothing With An Optimized Cubic Filter," DEEI, University of Trieste, Trieste, Italy	
NO	DL	KIM, Jaemin et al., "Spatiotemporal Adaptive 3-D Kalman Filter for Video," pp. 1-12. Samsung Semiconductor, Inc. San Jose, California	
JK	DM	LIU, Julia J., "ECE497KJ Course Project: Applications of Wiener Filtering In Image and Video De-Noising," pp. 1-15, May 21, 1997	
JK	DN	JOSTSCHULTE, K. et al., "A Subband Based Spatio-Temporal Noise Reduction Technique for Interlaced Video Signals," University Dortmund, Dortmund, Germany	
JK	DO	KOSSENTINI, Faouzi et al. "Predictive RD Optimized Motion Estimation for Very Low Bit-Rate Video Coding," 1997 IEEE, XP-000726013, pp. 1752-1963, September 1, 1996, 1997 International Conference on Image Processing, Vancouver, Canada	
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JK	DQ	BRANDENBURG, Karlheinz, "MP3 and AAC Explained," Proceedings of AES 17th International Conference, XP008004053, pp. 99-110, Erlangen, Germany	
JK	DR	PAINTER, Ted et al., "Perceptual Coding of Digital Audio," Proceedings of the IEEE, Vol. 88, No. 4, April 2000, pp. 451-513, XP001143231, ISSN: 0018-9219, Arizona State University, Tempe, AZ	
JK	DS	HASSANZADEGAN, Hooman et al., "A New Method for Clock Recovery in MPEG Decoders," pp. 1-8, Basamad Negar Company, Tehran, Iran	

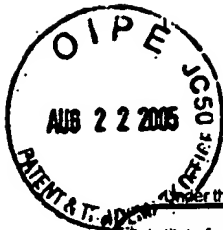
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**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Complete If Known	
Application Number	09/990,896
Filing Date	11/16/2001
First Named Inventor	James Robert KELTON
Art Unit	2665
Examiner Name	NGUYEN, Steven
Attorney Docket Number	VIXS.0100280 (1459-VIXS028)

Sheet	7	of	8
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**NON PATENT LITERATURE DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	DT	KAN, Kou-Sou et al., "Low-Complexity and Low-Delay Video Transcoding for Compressed MPEG-2 Bitstream," Natinal Central University, Chung-Li, Taiwan	
	DU	MITCHELL et al., "MPEG Video Compression Standard: 15.2 Encoder and Decoder Buffering," Chapman and Hall Digital Multimedia Standards Series, pp. 340-356, XP002115299, ISBN: 0-412-08771-5, Chapman and Hall, New York	
	DV	WHYBRAY, M.W. et al., "Video Coding - Techniques, Standards and Applications," BT Technol J. Vol. 14, No. 4, 4 October 1997, pp. 86-100, XP000722036	
	DW	"SHARP Product Information: VTST-Series NTSC/PAL Electronic Television Tuners," RF Components Group, Sharp Microelectronics of the America, 1997	
	DX	EDWARDS, Larry M., "Satisfying Your Need for Net Speed," San Diego Metropolitan, September 1999, <<www.sandiegometro.com/1999/sept/speed.html>>, retrieved on 07/19/2001	
	DY	OZ, Ran et al., "Unified Headend Technical Management of Digital Services," BigBend Networks, Inc.	
	DZ	MURIEL, Chris, "What is Digital Satellite Television?," What is Digital Television Rev. 3.0, April 21, 1999, SatCure, Sandbach, England, <<http://www.netcentral.co.uk/satcure/digifaq.htm>>, access on 04/20/2001	
	EA	"CONEXANT Products & Tech Info: Product Briefs: CX24108," 2000-2002 Conexant Systems, Inc. access on 04/20/2001	
	EB	"CONEXANT Products & Tech Info: Product Briefs: CX22702," 2000-2002 Conexant Systems, Inc. access on 04/20/2001	
	EC	"TDC: Components for Modems & Digital Infotainment: Direct Broadcast Satellite Chipset," 2001 Telecom Design Communications Ltd., U.K., <<http://www.tdc.co.uk/modmulti/settop/index.htm>>, access on 04/20/2001	

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	ED	"White Paper: Super G: Maximizing Wireless Performance," March 2004, Atheros Communications, Inc., pp. 1-20, Document No. 991-00006-001, Sunnyvale, California	
	EE	KWOK, Y.K. et al., "Efficient Multiple Access Control Using a Channel-Adaptive Protocol for a Wireless ATM-Based Multimedia Services Network," March 29, 2000, Computer Communications 24(2001) 970-983, University of Hong Kong, Hong Kong, PRC	
	EF	LIANG, Ying-Chang et al., "Joint Downlink Beamforming, Power Control, and Data Rate Allocation for DS-CDMA Mobile Radio with Multimedia Services," 2000 IEEE, pp. 1455-1457, Ceneter for Wireless Communication, Singapore	
	EG	RAZAVI, Behzad, "Challenges in Portable RF Transceiver Design," September 1996, 1996 IEEE, pp. 12-25, Circuits & Devices	
	EH	MANNION, Patrick, "IceFyre Device Cools 802.11a Power Consumption," September 24, 2001, Planet Analog, National Semiconductor, << <a href="http://www.planetanalog.com/story/OEG20010924S0079">http://www.planetanalog.com/story/OEG20010924S0079</a> >>, access on 11/05/2001	
	EI	"ICE Fyre Semiconductor: IceFyre 5-GHz OFDM Modem Solution," September 2001, pp. 1-6, ICEFYRE: Rethink Wireless, IceFyre Semiconductor, Inc.	
	EJ	POZAR, David M., "Theory and Design of Ferrimagnetic Components," 1990, pp. 529, Microwave Engineering, Addison-Wesley Publishing Company, Inc.	
	EK	"Part 11: Wireless LAN Medium Access Control (MAC) and Physical Layer (PHY) Specifications: High-Speed Physical Layer in the 5 GHz Band," 1999 IEEE, pp. 1-83, Supplement to IEEE Standard for rntormation Technology, IEEE Std 802.11a-1999, LAN/MAN Standards Committee	
	EL	CICIORA, Walter S., "Cable Television in the United States: An Overview," May 25, 1995, pp. 1-90, Cable Television Laboratories, Inc., Louisville, Colorado	

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(Use as many sheets as necessary)

Sheet 1 of 1

Filing Date

11/16/01

First Named Inventor

Kelton, James Robert

Art Unit

2665

Examiner Name

Nguyen, Steven H. D.

Attorney Docket Number

1459.0100280

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## **NON PATENT LITERATURE DOCUMENTS**

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AA	AA	Pedro Assuncao and Mohammad Ghanbari, "Rate Reduction Techniques for MPEG-2 Video Bit Streams," SPIE Vol. 2952, April 1996, 10 pp.	
BB	BB	Jae-Young Pyun, "QoS Provisioning for Video Streaming over IEEE 802.11 Wireless LAN," (abridged) IEEE Conference in Consumer Electronics, 6/16/2003, 3 pp. [online] Retrieved from the Internet 7/8/2003 at URL	
CC	CC	Krisda Lengwehasatit and Antonio Ortega, "Computationally Scalable Partial Distance Based Fast Search Motion Estimation," Univ. of Southern California, 4 pp., (date unknown)	
DD	DD	Manoj Aggarwal and Ajai Narayan, "Efficient Huffman Decoding," 2000 IEEE, 0-7803-6297-7, pp. 936-939.	
EE	EE	Peng Yin et al., "Video Transcoding by Reducing Spatial Resolution," Princeton University, Princeton, NJ, 4 pp., 2000	
FF	FF	Zhigang Fan and Ricardo de Queiroz, "Maximum Likelihood Estimation of JPEG Quantization Table in the Identification of Bitmap Compression History," Xerox Corporation, Webster, NY, 4 pp. (date unknown)	
GG	GG	Luis Ducla Soares et al., "Influence of Encoder Parameters on the Decoded Video Quality for MPEG-4 Over W-CDMA Mobile Networks," NTT DoCoMo, Inc. technical paper, 4 pp. (date unknown)	
HH	HH	Thomas Wiegand et al., "Long-Term Memory Motion-Compensated Prediction for Robust Video Transmission," in Proc. ICIP2000, 4 pp.	
II	II	P. Greg Sherwood et al., "Efficient Image and Channel Coding for Wireless Packet Networks," Univ. of CA, San Diego, CA, 4 pp. (date unknown)	
JJ	JJ	Donghoon Yu et al., "Fast Motion Estimation for Shape Coding in MPEG-4," 2003 IEEE Transactions on Circuits and Systems for Video Technology, Vol. 13, No. 4, April 2003, pp. 358-363	

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